

United States Senate

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April 1, 2019

The Honorable Ajit Pai
Chairman
Federal Communications Commission
445 12th St., SW
Washington, DC 20554

RE: Preventing interference in the 6 GHz band, ET Docket No. 18-295

Dear Chairman Pai,

As the Federal Communications Commission (FCC) moves forward on its proposal to allow unlicensed operations in the 6 GHz spectrum band, I respectfully urge you to ensure that incumbent license holders, especially those used by critical infrastructure owners and operators, are protected from potential radiofrequency interference. Given the importance of these services for our economic and national security, the Commission must ensure that their licensed microwave systems are protected against potential interference from unlicensed operations in the 6 GHz band.

Over the past few months, I have heard from utilities in my state about the above-referenced proposed rulemaking and the detrimental impact it could have on safe, reliable and secure delivery of essential electricity services. Electricity, gas, and water utilities use the 6 GHz band for voice and data communications to support remote monitoring of critical-infrastructure systems, emergency response, storm restoration, and general situational awareness. Allowing unlicensed use in the 6 GHz band without adequate interference protections would pose significant risks to safety and operational reliability of utility systems.

The 6 GHz band is uniquely suited to deliver the long-distance, low latency communications utilities and other critical infrastructure industries (CII) require. Interference on a utility's communication network reduces its ability to respond to problems or abnormalities within their service territory, degrading their situational awareness and potentially compromising electric reliability. Incumbent utility licensees will have few, if any, other spectrum bands to choose from should they be forced to relocate out of the 6 GHz band due to this proceeding.

I am well aware that our nation's need for spectrum is growing as the number of wireless networks and devices proliferate, and I appreciate the Commission's continued efforts to ensure the efficient and effective use of spectrum. I am concerned, however, that the recent Notice of Proposed Rulemaking does not adequately balance the public interest in protecting the safe, reliable and secure delivery of essential services by utilities and other CII users. I am also concerned that the interference risk would not be effectively mitigated by the proposed automated frequency coordination (AFC) system as envisioned in this proceeding.

Given the importance of essential energy and water services to our nation's wellbeing, I encourage you to consider how this proposal could impact the critical infrastructure industries who rely on the 6 GHz band for their vital communications networks.

Thank you for considering these views and for your service to America.

Sincerely,

A handwritten signature in blue ink, reading "John Kennedy". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

John Kennedy
United States Senator



FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

April 29, 2019

The Honorable John Kennedy
United States Senate
416 Russell Senate Office Building
Washington, D.C. 20510

Dear Senator Kennedy:

Thank you for your letter concerning the Commission's proposed rulemaking related to unlicensed use of the 5.925-7.125 GHz (6 GHz) band. I agree that protecting incumbent users from interference is an important consideration. That is why the FCC suggested allowing unlicensed devices to operate in the 6 GHz band only in locations and in frequencies where they would not cause harmful interference to incumbents.

As an initial matter, unlicensed operations relying on Wi-Fi and other technical standards have become highly popular among consumers seeking to connect wirelessly to the Internet using countless devices—and have become a critical component of the mobile wireless ecosystem. The Commission's October 2018 Notice of Proposed Rulemaking proposed allowing unlicensed use of the 6 GHz band while ensuring that the licensed services operating in the spectrum would continue to thrive. Expanding use of this spectrum will advance the Commission's efforts to make broadband connectivity available to all Americans, especially those in rural and underserved areas.

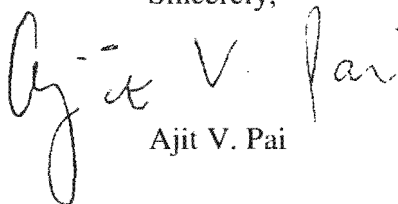
In order to minimize any potential harmful interference, we proposed rules for two types of unlicensed devices tailored to protect incumbent services that operate in distinct parts of the 6 GHz band. In the 5.925-6.425 GHz and 6.525-6.875 GHz sub-bands, unlicensed devices would only be allowed to transmit under the control of an automated frequency control (AFC) system. These frequencies are heavily used by point-to-point microwave links (such as oil rigs and utilities) and some fixed-satellite systems. The AFC system would identify frequencies on which unlicensed devices could operate without causing harmful interference to fixed point-to-point microwave receivers.

In the remainder of the 6 GHz band—that is, the 6.425-6.525 GHz and 6.875-7.125 GHz sub-bands—unlicensed devices would be restricted to indoor use and would operate at lower power, without an AFC system. These frequencies are used for mobile services, such as the Broadcast Auxiliary Service and Cable Television Relay Service, as well as fixed-satellite services. Because technical aspects of these mobile services make the use of an AFC system impractical, the FCC has proposed a combination of lower-power and indoor operations, which would protect licensed services operating on these frequencies from harmful interference.

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I appreciate your sharing your views on this proceeding and can assure you that as we examine the record, we will take those views into account. Please let me know if I can be of further assistance.

Sincerely,

A handwritten signature in cursive script that reads "Ajit V. Pai". The signature is written in dark ink and is positioned above the printed name.

Ajit V. Pai